

supports. Two supports would be connected by square stainless-steel tubing to form the completed emplacement pallet. The supports would have a V-groove top surface to accept all waste package diameters. Emplacement pallet surfaces that contacted the waste package would be Alloy-22, the same material used for the outer package shell.

The ends of the waste package would extend past the ends of the emplacement pallet, which would allow placement of the waste packages end-to-end, within 10 centimeters (4 inches) of each other, without interference from the pallets (DIRS 153849-DOE 2001, Section 2.3.4.4.2).

2.1.2.3 Performance Confirmation Program

Performance confirmation refers to the program of tests, experiments, and analyses that DOE would conduct to evaluate the adequacy of the information used to demonstrate compliance that the repository would meet performance objectives. The performance confirmation program, which would continue through the licensing and construction phases and until the closure phase, would include elements of site testing, repository testing, repository subsurface support facilities construction, and waste package testing. Some of these activities would be a continuation of activities that began during site characterization.

To support performance confirmation activities, DOE would provide some specialized surface and subsurface facilities. DOE would build observation drifts below and above the *repository horizon* (DIRS 153849-DOE 2001, Section 2.5.2.2). The data-collection focus of the performance confirmation program would be to collect additional information to confirm the data used in the License Application. If the Nuclear Regulatory Commission granted a license, the activities would focus on monitoring and data collection for performance parameters important to terms and conditions of the license.

Performance confirmation drifts would be built about 15 meters (50 feet) above and below the emplacement drifts. DOE would drill boreholes from the performance confirmation drifts that would approach the rock mass near the emplacement drifts; instruments in these boreholes would gather data on the thermal, mechanical, hydrological, and chemical characteristics of the rock after waste emplacement. DOE would acquire performance confirmation data by sampling and mapping, from instruments in performance confirmation drifts or along the perimeter mains, ventilation exhaust monitoring, remote inspection systems in emplacement drifts, and monitoring of water quality in wells.

DOE would use the performance confirmation program data to evaluate system performance and to confirm predicted system response. If the data determined that actual conditions differed from those predicted, the Nuclear Regulatory Commission would be notified and remedial actions would be undertaken to address any such condition (DIRS 153849-DOE 2001, Sections 2.5 and 4.6).

2.1.2.4 Repository Closure

Before closure, an application to amend the Nuclear Regulatory Commission license would have to provide an update of the assessment of repository performance for the period after closure, as well as a description of the program for postclosure monitoring to regulate or prevent activities that could impair the long-term isolation of waste. The postclosure monitoring program, as required by Section 801(c) of the Energy Policy Act of 1992 and as required by the Nuclear Regulatory Commission (10 CFR Part 63), would include the monitoring activities that would be conducted around the repository after the facility had been closed and sealed. Regulations at 10 CFR 63.51(a)(1) and (2) would require the submittal of a license amendment for closure of the repository (see Section 2.3.4.8). The details of this program would be delineated during processing of the license amendment for closure. Deferring the delineation of this program to the closure period would allow identification of appropriate technology, including technology that might not be currently available (DIRS 153849-DOE 2001, Sections 2.3.4.8 and 4.6.1).